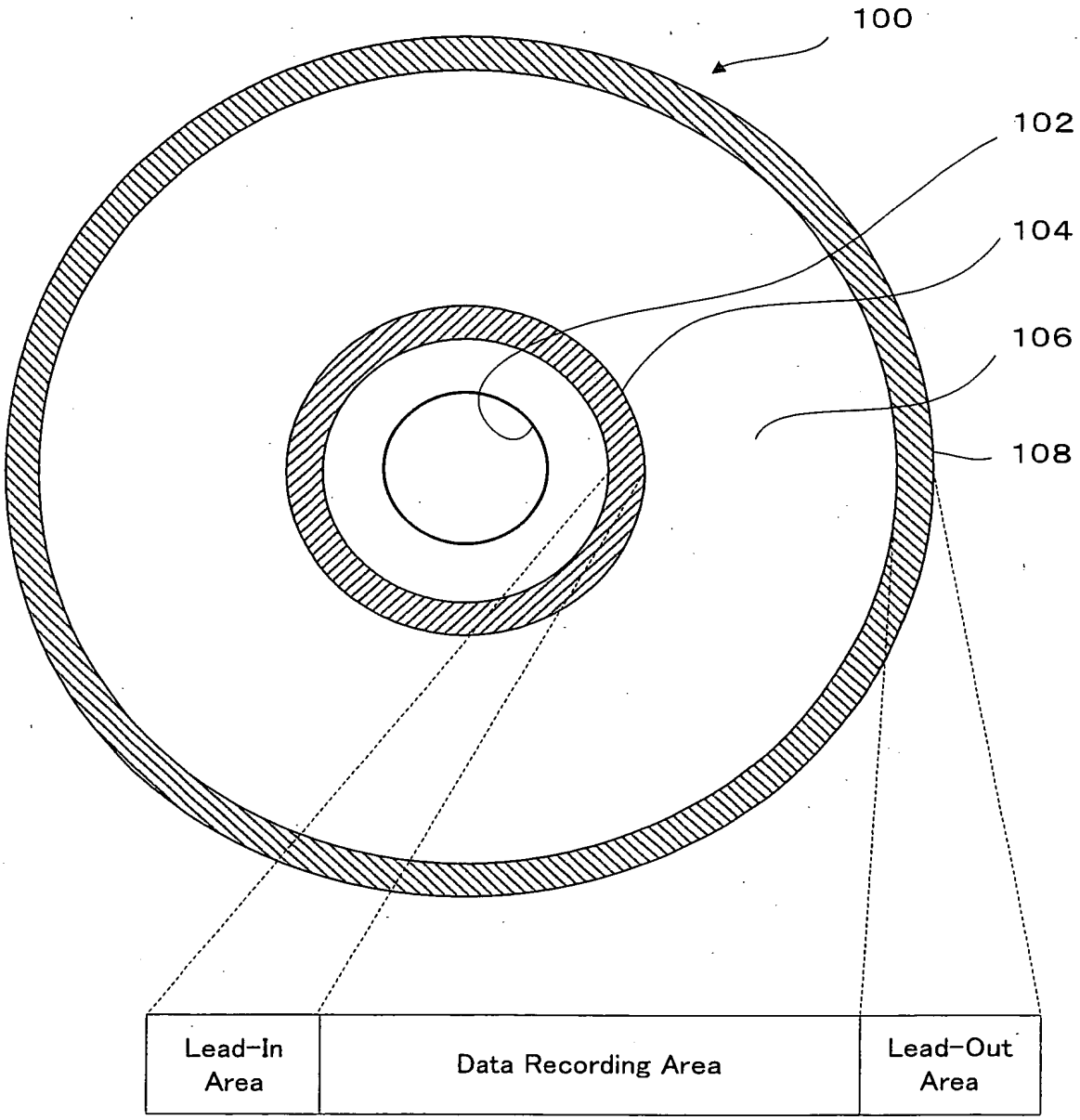
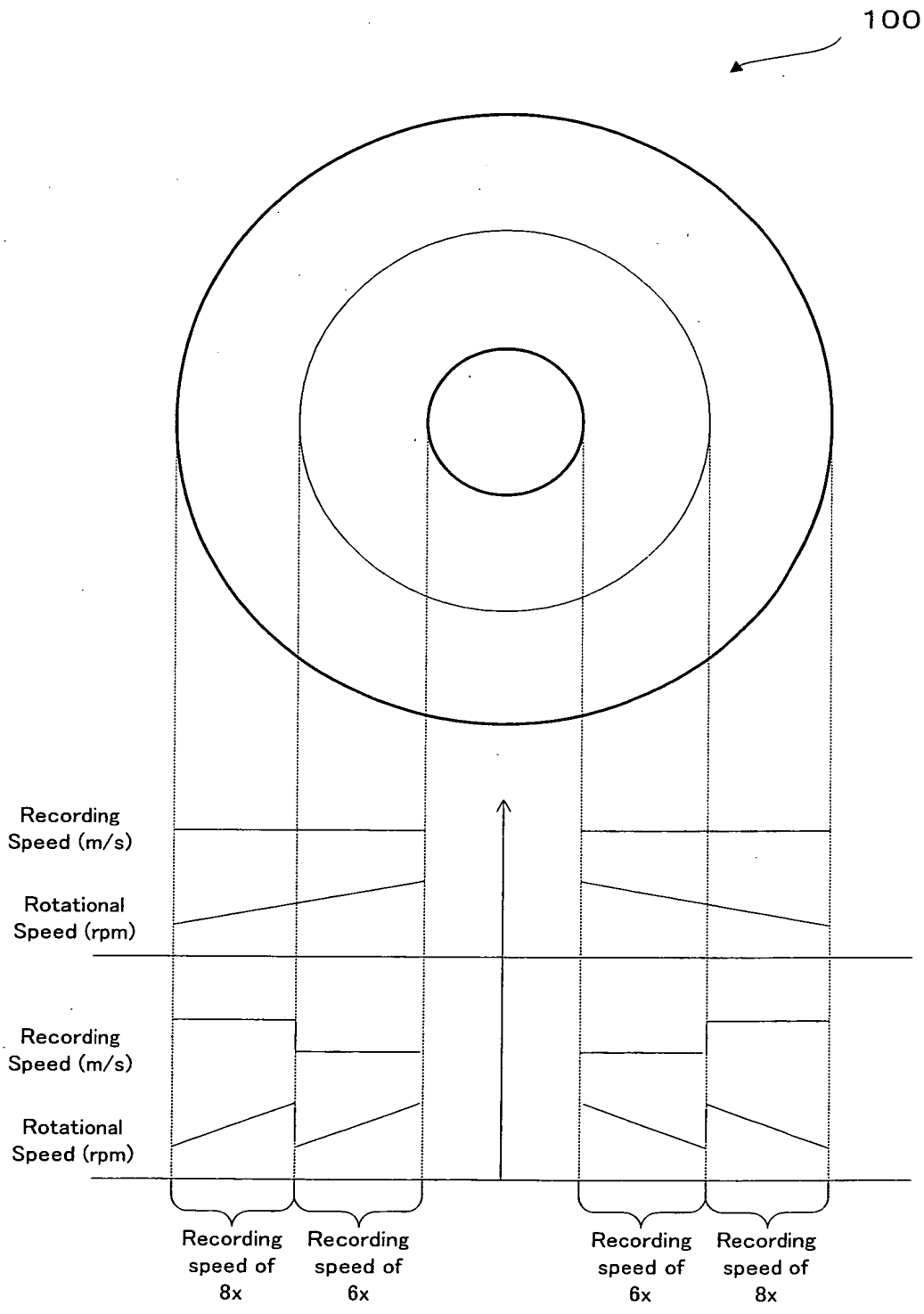
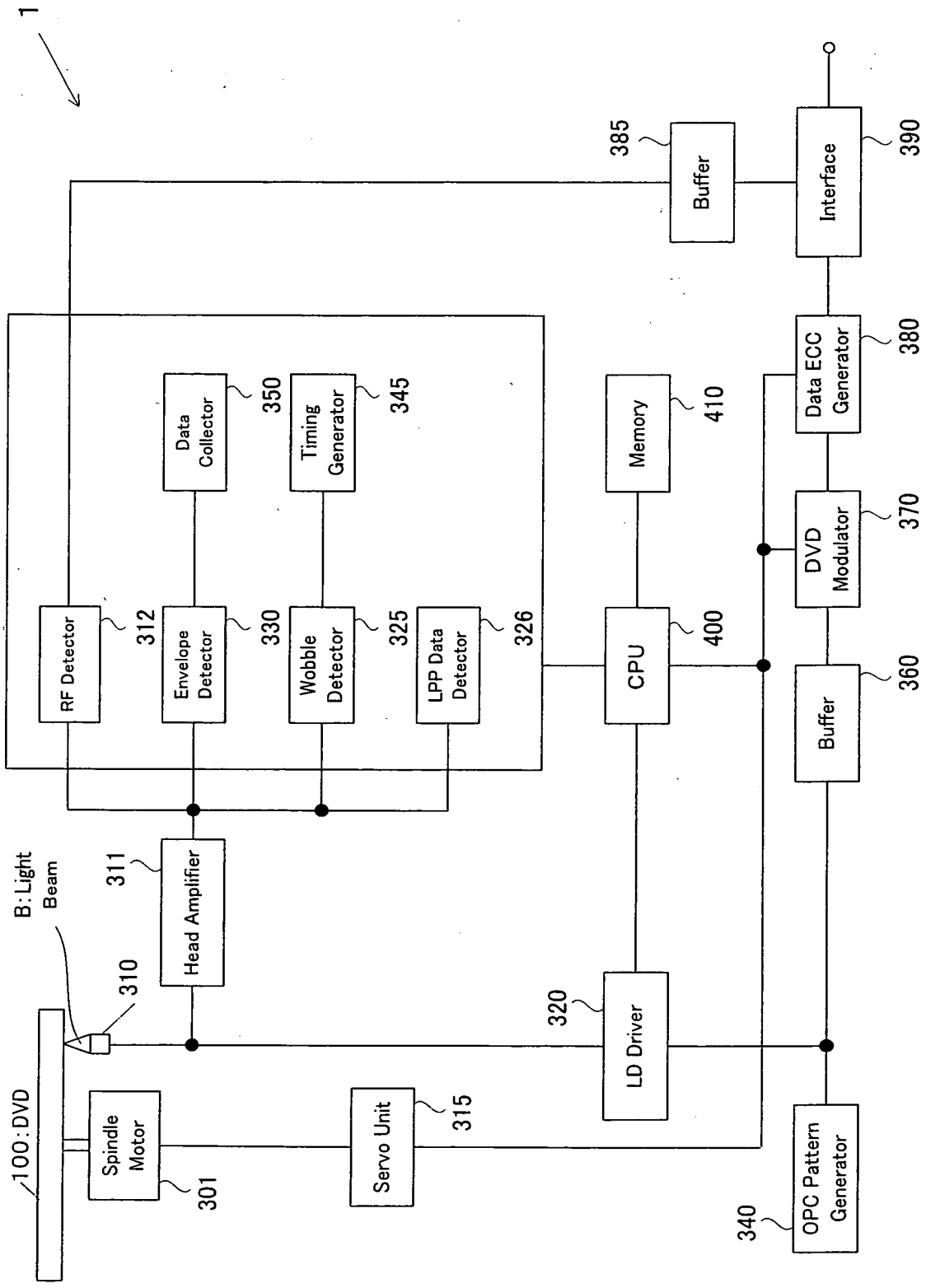
[FIG. 1]


100
102
104
106
108
Lead-In Area
Data Recording Area
Lead-Out Area

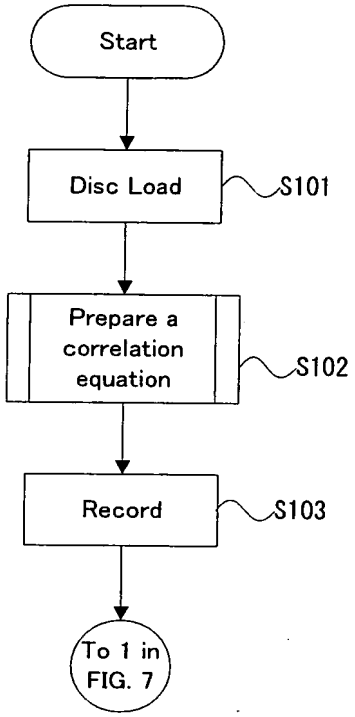
[FIG. 2]


100
Recording Speed (m/s)
Rotational Speed (rpm)
Recording Speed (m/s)
Rotational Speed (rpm)
Recording speed of 8x
Recording speed of 6x
Recording speed of 6x
Recording speed of 8x

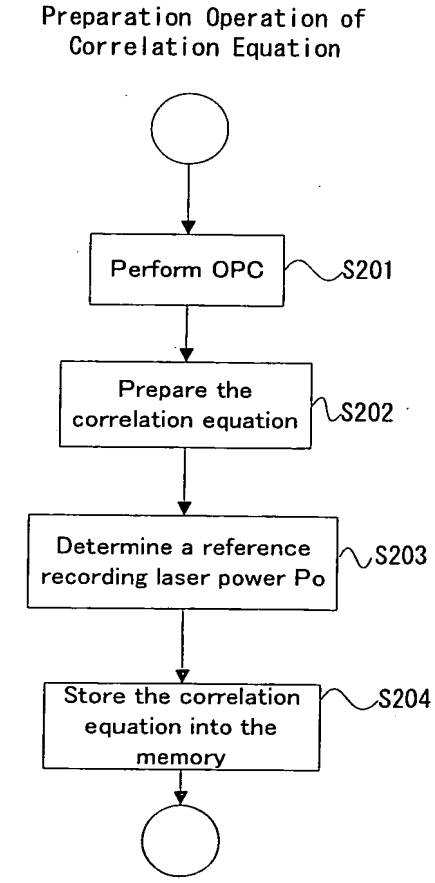
[FIG. 3]


1
385
Buffer
390
Interface
380
Data ECC Generator
370
DVD Modulator
360
Buffer
410
Memory
400
CPU
350
Data Collector
345
Timing Generator
312
RF Detector
330
Envelope Detector
325
Wobble Detector
326
LPP Data Detector
311
Head Amplifier
B: Light Beam
310
320
LD Driver
100: DVD
Spindle Motor
301
Servo Unit
315
340
OPC Pattern Generator

[FIG. 4]


Start
Disc Load
S101
Prepare a correlation equation
S102
Record
S103
To 1 in FIG. 7

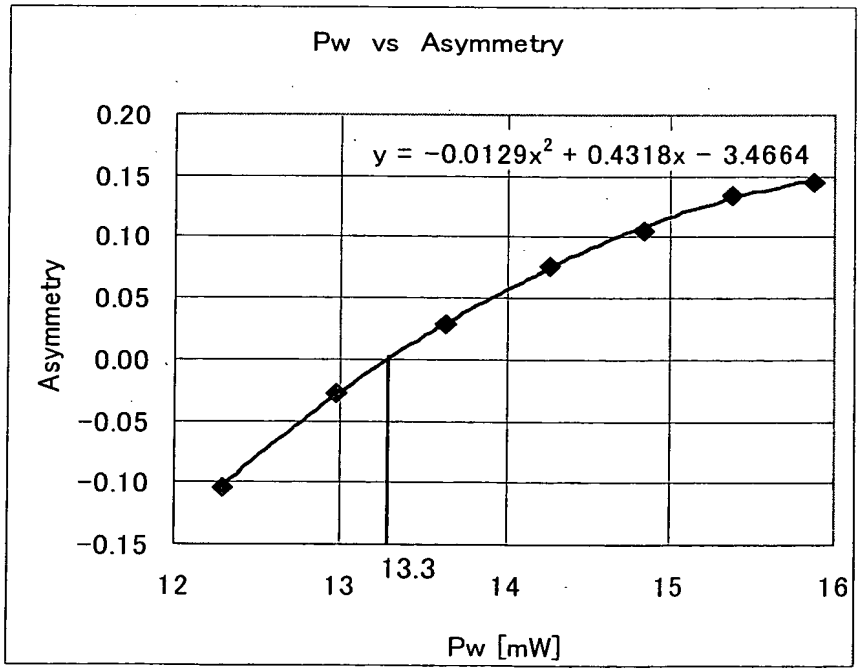
[FIG. 5]


Preparation Operation of Correlation Equation
Perform OPC
S201
Prepare the correlation equation
S202
Determine a reference recording laser power Po
S203
Store the correlation equation into the memory
S204

[FIG. 6]

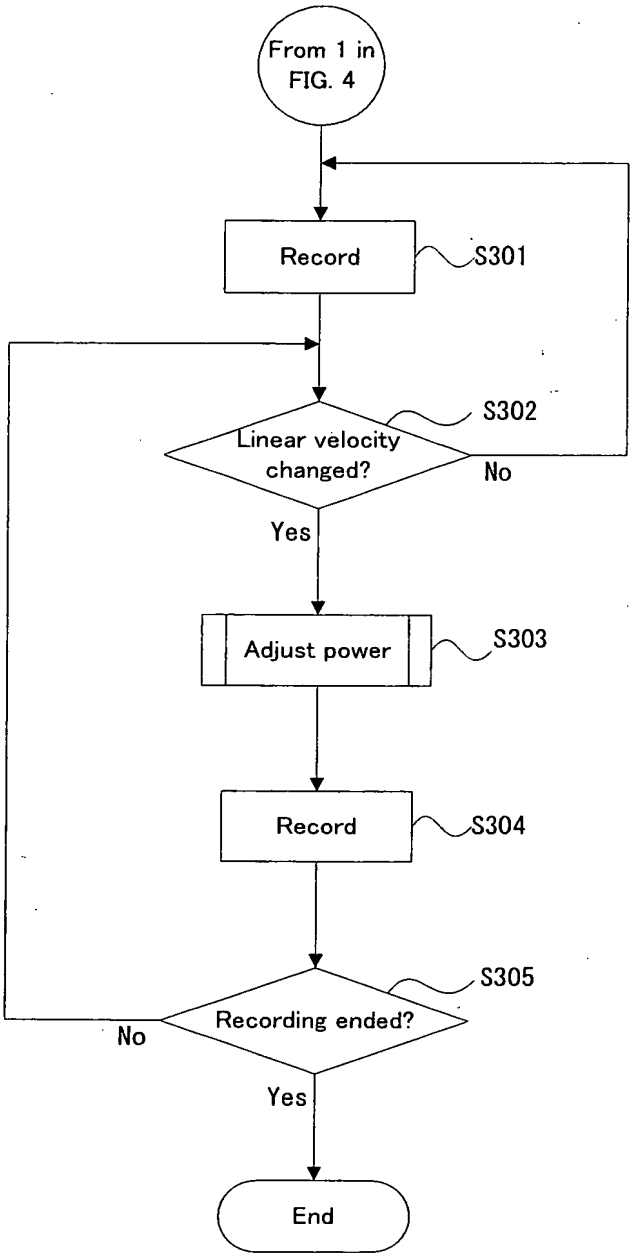
Recording power	Asymmetry
12.3	-0.104
13.0	-0.027
13.6	0.029
14.3	0.076
14.8	0.106
15.4	0.135
15.9	0.146

(a)



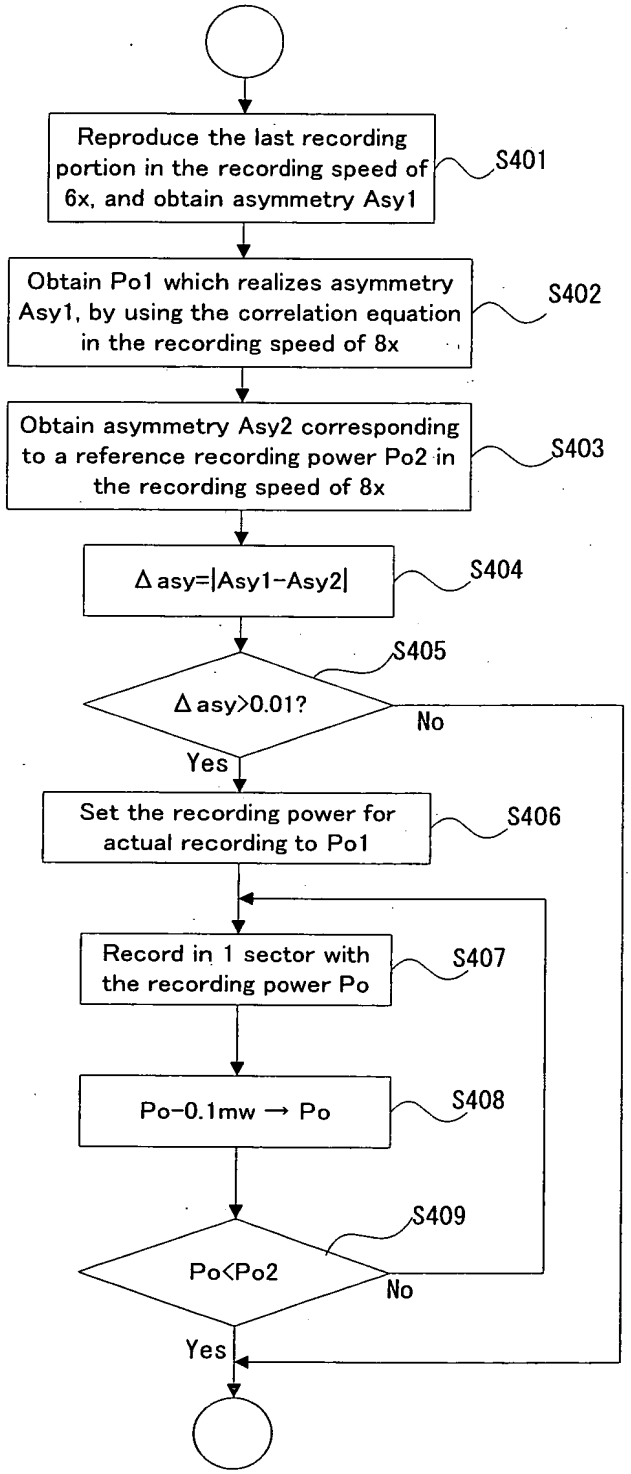
(b)

[FIG. 7]


From 1 in FIG. 4
Record
S301
S302
Linear velocity changed?
No
Yes
Adjust power
S303
Record
S304
S305
Recording ended?
No
Yes
End

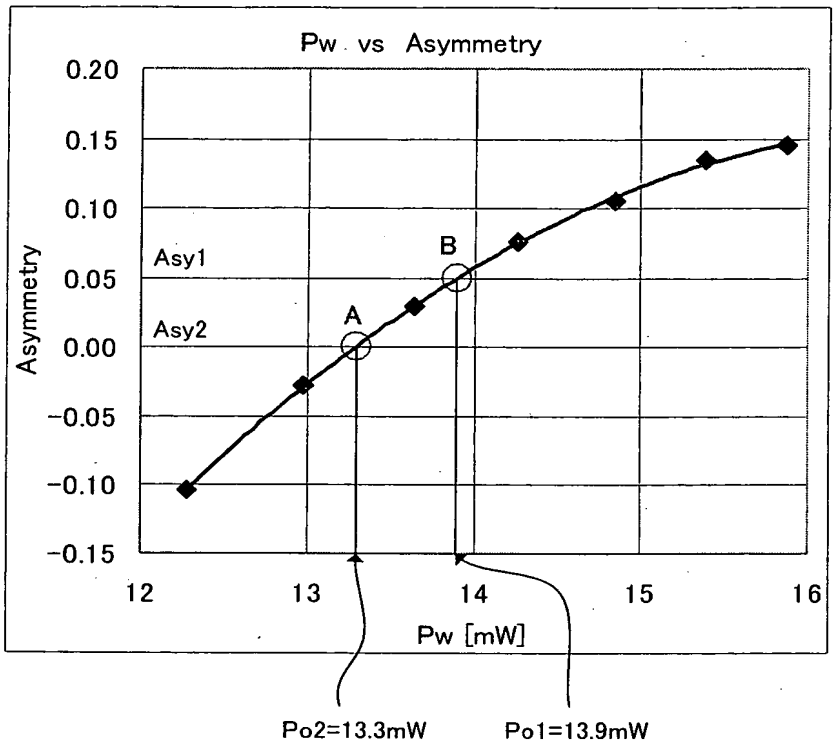
[FIG. 8]

Power Adjustment operation

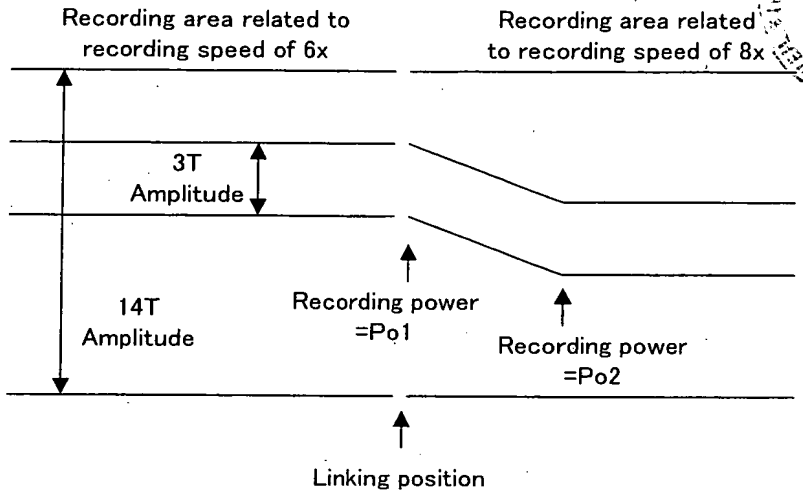


[FIG. 9]

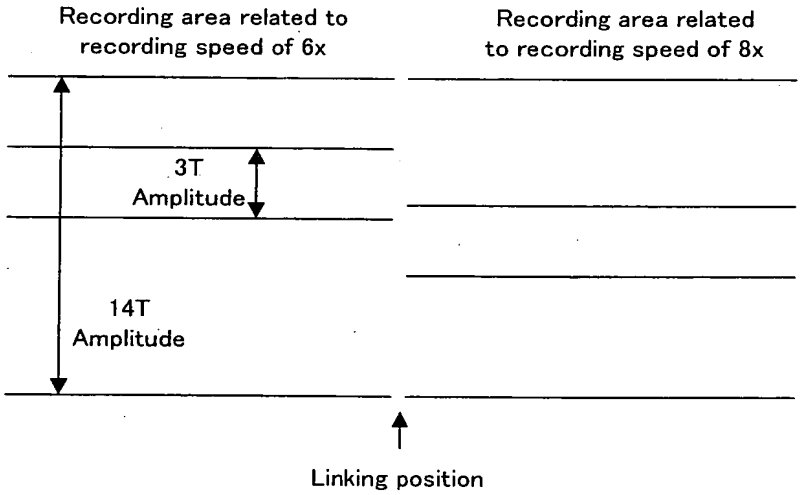
Correlation equation in recording speed of 8x



[FIG. 10]


Recording area related to recording speed of 6x
Recording area related to recording speed of 8x
3T Amplitude
14T Amplitude
Recording power =Po1
Recording power =Po2
Linking position

(a)


Recording area related to recording speed of 6x
Recording area related to recording speed of 8x
3T Amplitude
14T Amplitude
Linking position

(b)